

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification in the paragraph beginning at page 1, line 7 to read as follows:

Injection devices generally comprise a number of elements. Generally there is a cartridge of a medicament having a nozzle orifice at one end, out of which in the case of a needle-less injection device the medicament is driven under a pressure sufficient to drive it through a patient's skin. Generally there is a drive means to drive the medicament in this manner, typically comprising a plunger moveable within the cartridge toward the nozzle orifice to drive the medicament, and a means to drive the plunger, such as a spring, commonly comprising a spring means such as compressed gas driving a ram which bears upon the plunger. Generally, there is a trigger means operable to cause the drive means to act. Often there is a safety device functioning to prevent the drive means from being inadvertently operated. Such a safety means may function in various ways, for example by obstructing the movement of one or more ~~part~~ parts of the injection device which is essential for operation of the device, for example functioning by preventing the trigger means from operating. The cartridge of medicament may for example comprise a dose of liquid or powdered medicament to be administered to the patient. Sometimes in a needle-less injection the nozzle orifice of the cartridge is closed prior to use by a break-off tip. Often the drive means, cartridge is closed prior to use by a break-off tip. Often the drive means, cartridge and orifice lie along an elongate direction which corresponds to the direction along which the plunger moves and the medicament is dispensed.

Please amend the specification in the paragraph beginning at page 13, line 22 to read as follows:

Referring to Figs. 5-9 a casing 50 of this invention is shown in a longitudinal sectional view. The casing 50 encloses a device 10 as shown in Figs 1-4. The device 10 is an elongate device, the direction of its longitudinal axis being shown by a dashed line. This direction is also the direction along which the sleeve parts 102a, 102b move relative to each other, and the direction in which medicament content is ejected from the orifice 106 ~~405~~.

Please amend the specification in the paragraph beginning at page 14, line 6 to read as follows:

The tear-off band 137 shown in Figs. 1-4 is not present on the device 10. In its place is a safety means 54 comprising a collar which fits around the cartridge 103 and the sleeve parts 102a, 102b. The construction of part 54 is shown in more detail in Fig. 9. As seen in Fig. 9A being a cross section through the collar 54 and device 10 at line A-A in Fig. 9, and Fig. 9B being a longitudinal part sectional view through the collar 54 and immediately adjacent part of device 10, at right angles to the line A-A of Fig. 9A, the part 54 comprises a collar 541 of cross sectional dimensions greater than that of sleeve parts of sleeve parts 102a, 102b. The part 54 has an obstructer part 542 being a block which when the part 54 is in place around the cartridge 103 as shown in Fig. 5 obstructs any relative longitudinal movement of sleeves 102a and 102b, by fitting longitudinally between them and blocking their relative movement. The collar 541 is supported in this configuration by resilient spring leaves 543, 544 which bear on the sleeve parts 102a, 102b. This is the first configuration of part 54.

Please amend the specification in the paragraph beginning at page 14, line 20 to read as follows:

Referring to Fig. 6 the second casing part 52 has been rotated relative to the first casing part 51 about the axis of rotation R, thereby unscrewing second casing part 52 from first casing part 51 at screw connection 53 and disconnecting parts 51 and 52. Second casing part 52 has internal parts e.g. internal supports, walls etc. (not shown but the construction of which will be apparent), which bear upon the break-off tip 135. Axis R is parallel to but no co-axial with the longitudinal axis of the part 10, a shearing force is applied to the frangible joint 136 ~~137~~, which consequently breaks. The device 10, is now in a configuration corresponding to Fig. 2.

Please amend the specification in the paragraph beginning at page 14, line 28 to read as follows:

Referring to Fig. 7 an actuator means is provided by a resilient tongue 55, integral with first casing part 51, and which can be inwardly deflected by pressure on an operating button 56. This inward deflection causes button 56 ~~means 55~~ to bear upon the upper surface (as seen in Fig. 9) of the collar 541,

and the collar 541 to be consequently moved downwardly against the resilience of springs 543, and the obstructer part 542 to be consequently moved into a position in which it does not obstruct the relative movement of sleeve parts 102a and 102b. This is shown more clearly in Fig. 9C, being the second configuration of part 54. When in this second configuration the first casing part 51 and part 54 may have co-operating means, e.g. snap fit detent means, so that part 54 is retained in this second configuration independently of pressure applied by button 56 ~~part 55~~. Alternatively, e.g. as a further safety feature, the casing may be constructed so that continued pressure on part 55 is necessary to hold part 54 in this second configuration. The device 10 is now in a configuration corresponding to Fig. 3 2.

Please amend the specification in the paragraph beginning at page 15, line 22 to read as follows:

Referring to Fig. 10, another casing 110 of this invention is shown in a side view. The casing 100 incorporates a device 10 as with the casing of Figs. 5-9 ~~4-9~~. The casing 100 comprises first casing part 111 and second casing part 112. The internal construction of the first casing part 111 is analogous to that of first casing part 51, i.e. incorporating a safety means 54 and an actuating means 55, 56 as therein.

Please amend the specification in the paragraph beginning at page 15, line 27 to read as follows:

Fig. 11 shows a plan view of the casing 110 illustrating more clearly the construction of the part 55 and 56, which is analogous to those of Figs. 5-9 ~~4-8~~.

Please amend the specification in the paragraph beginning at page 16, line 9 to read as follows:

The actuator button 56 ~~part 55~~ can then be operated in a manner analogous to the casing of Figs. 5-9 to render the device 10 ready to trigger and operate.

Please amend the specification in the paragraph beginning at page 16, line 11 to read as follows:

The orifice 106 can then be placed against the user's skin 11 in a manner analogous to Fig. 8 and pressure can be applied to the first casing part 111 ~~54~~ to force sleeve part 102a downwardly relative to sleeve part 102b causing the device 10 to "fire" as in Fig. 4 and 8 to inject medicament 105 through the user's skin 11.

Please amend the specification in the paragraph beginning at page 16, line 27 to read as follows:

The dimensions of the casing parts 111 and 112 may be such that the second casing part 112 may rotate through 180° from the position shown in Figs. 10 and 11 so that it can conveniently be "stowed" at the opposite end of the first casing part 111 ~~110~~ to that from which the orifice 106 projects.

Please amend the specification in the paragraph beginning at page 17, line 32 to read as follows:

In Fig. 15 the actuator means 151 comprises a pulley wheel ~~154~~, rotatably moveable e.g. by being mounted on an axle (not shown) relative to the casing 150 and which can easily be rotated by the user, e.g. by a thumb operation. There is a connector means 152 connecting the pulley wheel 151, e.g. an integral construction, to the safety means 137 whereby the user can rotate the pulley wheel 151 to pull the safety means from its first configuration (as shown in Fig. 15) into its second configuration e.g. analogous to Figs. 1-4.

Please amend the specification in the paragraph beginning at page 18, line 5 to read as follows:

Referring to Figs. 16 and 17, these illustrate casings similar in concept to Figs. 10-11 and Figs. 5-8, corresponding parts of which are numbered correspondingly, but in which the second casing part 163 or 172 ~~112, 52~~ comprises the actuator means 161, or safety means 171, so that the movement of the second casing part 163 or 172 ~~112, 52~~ relative to the first casing part 111, 51 causes the safety means

162, 171 of an injector device 10 enclosed within the casing 160, 170 to move from its first configuration to its second configuration.

Please amend the specification in the paragraph beginning at page 18, line 11 to read as follows:

In Fig. 16 the second casing part 163 comprises a bearing part 161 in the form of plastics connector strip 161 which may be integrally made with the tear-off band 162 which comprises a safety means analogous in operation to that 137 of Fig. 12. When the second casing part 163 is rotated to unscrew casing part 163 from first casing part 51, the bearing part 161 bears upon the safety means 162 by pulling the safety means 162 and unwinding safety means 162 from the device 10 enclosed therein, as shown in Fig. 16A. Consequently the break-off tip 135 is first broken off as second casing part 163 rotates, then the safety means 162 functions to allow the trigger of the device 10 to operate in a manner analogous to that above.

Please amend the specification in the paragraph beginning at page 18, line 20 to read as follows:

In Fig. 17 the second casing part 172 itself comprises a safety means. The second casing part 172 incorporates at least one obstructer part 171, projecting inwardly toward the device 10 enclosed therein. In its first configuration as shown in Fig. 17 the obstructer part 171 functions to obstruct relative movement of the trigger parts 102a, 102b of the device 10 as shown in Figs. 1-4. As second casing part 172 swings in an arc about the pivot axis 113, the second casing part 172 firstly breaks off the break-off tip in a manner analogous to Figs. 10 and 11, and then as second casing obstructer part 171 moves out of its obstructing position between the upper sleeve part ~~two trigger parts~~ 102a, and lower sleeve part 102b. The first casing part 170 may be made with suitable clearances etc. to allow the movement of the obstructer part 171.

Please amend the specification in the paragraph beginning at page 19, line 1 to read as follows:

Referring to Fig. 18 a casing 180 of this invention is shown in a longitudinal sectional view. The casing 180 is of multi-part construction for example comprising a first casing sub-part 181 and a second casing sub-art 182 which fit together by a tight friction or snap-fit fit of plug part 1811 of part 181. When fitted together the parts 181 and 182 define an elongate casing which can enclose an injection device (not shown) of the general type 10 described above, with its break-off tip 135 ~~423~~ projecting through an end opening 183 of part 182. The casing sub-parts 181, 182 are shaped internally and are provided with internal support ribs 184 to hold the device 10 non-rotatably within the assembled casing 181, 182. Internally the part 182 has a conical interior at 185. The device 10 has a corresponding conical outer profile which can abut against this internal conical profile 185, and there is also an end support 186 against which a device 10 within the casing assembly 181, 182 can abut, and these features prevent longitudinal movements of the device 10.

Please amend the specification in the paragraph beginning at page 19, line 15 to read as follows:

Casing sub-part 182 incorporates an actuator means 187, 177 similar in construction to that 56, 57 of Fig. 7 ~~5-8~~. The actuator means comprises a resilient tongue 187, integral with sub-part 182, an which can be inwardly deflected by pressure on an operating button 188.

Please amend the specification in the paragraph beginning at page 19, line 19 to read as follows:

Located within sub-part 182 is a collar 189, similar in overall construction to that described with references to Fig. 9. Collar 189 is shown in a longitudinal view in Fig. 18A and in perspective view in Fig. 18B ~~49B~~. Corresponding to Fig. 9 the collar 189 comprises an obstructer part 1891 and resilient spring leaves 1892. The operation of the collar 189 under the action of the actuator means 187, 188 is analogous to collar 541 of Fig. 9. However as an additional feature the sub-part 182 is provided with a cut out 190 into which the obstructer part 1891 may fit when the collar 189 is displaced in the downward

direction as seen, so that the obstructer part 1891 can be seen therein as a confirmation that the device has been properly operated.

Please amend the specification in the paragraph beginning at page 20, line 1 to read as follows:

In a construction and operation analogous to Figs. 5 and 6, the second casing part 200 can be rotated relative to first casing part 181, 182, about an axis of rotation thereby unscrewing second casing part 200 from first casing sub-part 182 at screw connection 201, 202, thereby disconnecting parts 181, 182 ~~and from second casing part~~ 200. Second casing part 200 is constructed such that the concavity 204 is not concentric with the axis of rotation, so that as second casing part 200 rotates about this axis the nose cone 203 is displaced transverse to the rotation axis and bears upon the break-off tip 135. A shearing force is consequently applied to the frangible joint 136 ~~437~~, which consequently breaks, in a manner analogous to Fig. 6.

Please amend the specification in the paragraph beginning at page 20, line 10 to read as follows:

The second casing part 200 is also constructed so that as it fits over sub-part 182, casing part 200 covers actuator means 187, 188 so that the actuator means 187, 188 is shielded from being actuated until casing part 200 has been unscrewed and removed, thereby first breaking off the break-off tip 135 and therefore causing device 10 to be operated in the correct operating sequence